9. MERVC Costs

Monitoring and evaluation costs will depend on what information is needed, what information and resources are already available, the size of the project area, the monitoring methods to be used, and frequency of monitoring. Furthermore, some methods require high initial costs: e.g., in remote sensing, start-up costs in terms of equipment and personnel training may make a one-time digital image survey prohibitively expensive, while making multiple surveys exceedingly cost effective. The cost for monitoring a forestry project in India has been estimated at 8.5% of the total project cost, and it seems that monitoring similar projects would not exceed 10% of the total cost (Ravindranath and Bhat 1997). In some cases, the monitoring and evaluation costs can be as high as 20% (personal communication from Margo Burnham, The Nature Conservancy, Jan. 28, 1999).[1]

Due to the availability of funding, we realize that some project developers and evaluators will not be able to conduct the most data intensive methods proposed in this report; however, we expect each project to undergo some evaluation and verification in order to receive carbon credits (especially, certified emission reduction units). Moreover, we believe that monitored projects will sequester more carbon and offset the cost of the monitoring because: (1) installations following a monitoring and evaluation protocol should come in near or even above the projected level of carbon sequestration; and (2) installations with some measurement of carbon sequestration should tend to have higher levels of sequestered carbon initially and experience carbon sequestration levels that remain high during the lifetime of the measure (e.g., see Kats et al. 1996). In the end, the cost of monitoring and evaluation will be partially determined by its value in reducing the uncertainty of carbon credits: e.g., will one be able to receive carbon credits with a value greater than 10% of project costs that are spent on monitoring and evaluation?

Because of concerns about high costs, MERVC activities cannot be too burdensome: in general, the higher the costs, the less likely organizations and countries will try to develop and implement forestry projects. However, in some cases, due to the enormous cost differential between the carbon reduction options of UNFCCC Parties, fairly high costs can be accommodated before these costs become prohibitive. Nevertheless, MERVC costs should be as low as possible. In sum, actual (as well as perceived) MERVC costs may discourage some transactions from occurring. Tradeoffs are inevitable, and a balance needs to be made between project implementation and the level of detail (and costs) of MERVC reporting guidelines.

[1] This percentage is expected to decrease as other project expenditures and costs accumulate over time.

Project estimates of impacts could be adjusted, based on the amount of uncertainty associated with the estimates and potential leakage, without conducting project-specific analyses. Projects with less accurate or less precisely quantified benefit estimates would have their estimates adjusted and therefore have their benefits rendered policy-equivalent to credits from projects that can be more accurately quantified. The U.S. Environmental Protection Agency's Conservation Verification Protocol reward more rigorous methods of verifying energy savings by allowing a higher share of the savings to qualify for tradable SO_2 allowances. Three options are available for verifying subsequent-year energy savings: monitoring, inspection and a default option (Meier and Solomon 1995). In the monitoring option, a utility can obtain credit for a greater fraction of the savings and for a longer period: biennial verification in subsequent years 1 and 3 (including inspection) is required, and savings for the remainder of physical lifetimes are the average of the last two measurements. The monitoring option requires a 75% confidence in subsequent-year savings (like in the first year). In contrast, the default option greatly restricts the allowable savings: 50% of first-year savings, and limited to one-half of the measure's lifetime. For the inspection option (confirming that the measures are both present and operating): a utility can obtain credit for 75% of first-year savings for units present and operating for half of physical lifetime (with biennial inspections), or 90% of first-year savings for physical lifetimes of measures that do not require active operation or maintenance (e.g., building shell insulation, pipe insulation and window improvements). Thus, utilities could use a simpler evaluation method at a lower cost and receive fewer credits, or they could use a more sophisticated method and receive more credits. A similar system could be applied to the crediting of forestry projects.